



**SEVERE ACUTE RESPIRATORY SYNDROME (SARS)  
CLINICIAN UPDATE  
March 26, 2003**

**SUMMARY:**

1. Physicians should continue to request travel histories on all patients who present with fever and acute respiratory disease syndromes. If patients have a recent (10 day) travel history to Asia, then the following steps should be taken:
  - a. Inpatient:
    - Standard Precautions (handwashing, and eye protection for all patient contact),
    - Contact Precautions (use of gowns and gloves for contact with patient or environment)
    - Airborne Precautions (use of negative-pressure isolation rooms and N-95 respirators for all persons entering the room)
  - Outpatient:
    - Suspected SARS patients should be triaged outside of waiting rooms and placed into a separate assessment area. Place a surgical mask on the patient. All medical evaluation and transport personnel should wear N-95 respirators.
  - Home:
    - Suspected SARS patients should wear a surgical mask at home and be instructed in good hand hygiene procedures.
  - b. Obtain a temperature, chest X-ray, pulse oximetry, blood culture, sputum Gram stain and culture, as well as a culture for respiratory viral pathogens including Influenza A and B and RSV. Ensure the lab saves specimens in case further analysis is needed.
  - c. Notify your Local Health Department or the Utah Department of Health's 24/7 emergency reporting number: 1-888-EPI-UTAH (374-8824)

**Recent Information:**

While initial reports postulated the causative organism to be a paramyxovirus (metapneumovirus) or an orthomyxovirus, currently CDC hypothesizes that the agent is a new member of the **coronavirus family**. Coronaviruses are a group

of viruses that are responsible for a significant proportion of upper respiratory infections (colds). Final identification is still pending.

As of today, the CDC is reporting 39 suspected SARS cases in 18 states (1 from Utah). Utah is investigating additional cases that may meet the revised case definition. There have been 456 cases reported worldwide, with 17 reported deaths.

Over 20,000 travelers returning from Southeast Asia daily are receiving CDC Health Alert Cards when they debark. You may see patients who present these cards to you. An example of the cards is on the CDC web site (see links below).

**Revised Suspect Case Definition (revisions are underlined):**

- (a) A measured temperature of >38 degrees Centigrade or 100.4 degrees Fahrenheit AND
- (b) One or more: cough, shortness of breath, difficulty breathing, hypoxia, or radiographic findings of pneumonia or respiratory distress syndrome AND
- (c) Recent travel to areas\* reporting suspected or documented community transmission of SARS within 10 days prior to onset of illness OR Close contact to a person suspected of having SARS (having cared for or lived with) within 10 days on onset of symptoms

\* Hong Kong and Guangdong Province, Peoples' Republic of China, Hanoi, Vietnam, and Singapore. Note that Toronto, Canada is no longer on this list.

**Clinical:**

Generally patients are 25-70 and were previously healthy. Incubation period is from 2-10 days.

**Prodrome:** SARS starts with a febrile prodrome (>38 degrees Centigrade) which may include headache, malaise, and myalgia.

**Presentation:** After 3-7 days, lower respiratory symptoms occur. In 10-20% of the cases, the respiratory illness is severe enough to require intubation and mechanical ventilation. Look for radiographic evidence of focal interstitial infiltrates progressing to more generalized, patchy, interstitial infiltrates or areas of consolidation.

**Laboratory:** Patients may have leukopenia and thrombocytopenia, along with elevated creatine phosphokinase and hepatic transaminases.

**Outcomes:** Case fatality rate is about 3%, however none of the cases currently being followed in the US have been fatal.

**Treatment:** Symptomatic treatment, including coverage for community-acquired pneumonias. For more information, see the current [MMWR dispatch](#).

**Travel Advisory:**

The risk of acquiring SARS from incidental contact such as a plane flight is unknown, but studies are currently underway to assess the risk. However, if there is concern that a passenger on a plane from Southeast Asia is seriously ill with a respiratory illness, then it may be prudent to place them in a surgical mask or ask them to cover their mouth and nose while coughing.

The World Health Organization (WHO) does not consider that the small health risk attributable to SARS significantly increases the health risk associated with travel to any destination.

**Infection Control:**

[CDC guidelines](#)

[WHO guidelines \(UDOH update\)](#)

**Links:**

[CDC web site](#)

[WHO web site](#)